

Claims:

- ✓ *Sub C1*
- 5 1. An isolated polynucleotide molecule encoding a candidate effector protein for the Grb7 family of signalling proteins, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 75% sequence identity to that shown as SEQ ID NO: 1.
- 10 2. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 85% sequence identity to that shown as SEQ ID NO: 1.
- 15 3. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence having at least 95% sequence identity to that shown as SEQ ID NO: 1.
- 20 4. A polynucleotide molecule according to claim 1, wherein the polynucleotide molecule comprises a nucleotide sequence which substantially corresponds to that shown as SEQ ID NO: 1.
- A* *Sub C2* 20 5. A host cell transformed with a polynucleotide molecule according to ~~any one of the preceding claims~~. ¹
- 25 6. A host cell according to claim 5, wherein the host cell is a mammalian, insect, yeast or bacterial host cell.
- A* 7. A method of producing a protein, comprising culturing the host cell of claim 5 ~~or 6~~ under conditions suitable for the expression of the polynucleotide molecule and optionally recovering the protein.
- A* 30 8. A purified protein encoded by a polynucleotide molecule according to ~~any one of claims 1 to 4~~.
- 35 9. A purified protein according to claim 8, wherein the protein comprises an amino acid sequence substantially corresponding to that shown as SEQ ID NO: 2.

✓
10. A fusion protein comprising an amino acid sequence substantially corresponding to that shown as SEQ ID NO: 2.

A
5 11. An antibody or fragment thereof which specifically binds to a protein according to claim 8 ~~or 9~~.

A
10 12. An oligonucleotide probe comprising a nucleotide sequence of at least 12 nucleotides, the oligonucleotide probe comprising a nucleotide sequence such that the oligonucleotide probe selectively hybridises to the polynucleotide molecule of ~~any one of claims 1 to 4~~ under high stringency conditions.

15 13. An oligonucleotide probe according to claim 12, wherein the oligonucleotide probe comprises a nucleotide sequence of at least 18 nucleotides.

20 14. A method of detecting in a sample the presence of an effector protein for the Grb7 family of proteins, the method comprising reacting the sample with an antibody or fragment thereof according to claim 11.

15 15. A method of detecting in a sample the presence of mRNA encoding an effector protein for the Grb7 family of proteins, the method comprising reacting the sample with an oligonucleotide probe of claim 12 ~~or 13~~.

add c3

Has
A1